



LEHIGH VALLEY PLANNING COMMISSION

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May 31, 2013

Mr. Irvin Keister, Chair
Lower Macungie Township Planning Commission
Municipal Building, 3400 Brookside Road
Macungie, Pennsylvania 18062

**RE: Hamilton Crossings
Plans dated April 15, 2013
Lower Macungie Township
Lehigh County**

Dear Mr. Keister:

The Lehigh Valley Planning Commission reviewed the Hamilton Crossings land development plan at its meeting on May 30, 2013 and voted to forward the following comments. Although the site is served by public sewer and water utilities and is located in an area designated for urban development on the "General Land Use Plan" map in *Comprehensive Plan, The Lehigh Valley ... 2030*, there are numerous issues related to specific policies stated in the County Comprehensive Plan that cause us to have strong reservations and objections to this proposal. Following is a summary of issues that cause us to consider the land development, road improvements on Route 222, and the proposed use of funds from the Tax Increment Financing (TIF) district inconsistent with *Comprehensive Plan, The Lehigh Valley ... 2030* adopted by Lehigh County June, 2005.

1. On page 11 of the Tax Increment Financing Plan narrative prepared by the Lehigh County Industrial Development Authority (LCIDA), dated April 2013, it is stated "the project is consistent with applicable County and regional comprehensive plans." It is the opinion of the LVPC staff that this project is inconsistent with the County Comprehensive Plan.
2. This section of Route 222, with a cost of \$140 million, was opened to traffic in September 2007 and designed specifically as a controlled access road to mitigate the

substantial traffic congestion issues on Hamilton Boulevard (old Route 222). The road was not designed to provide direct access to local properties or accommodate future development of the magnitude of Hamilton Crossings. Development of these parcels was to be of an appropriate size and scale that would be accommodated by driveway access to Krocks Road and Hamilton Boulevard only. PennDOT compensated property owners along Route 222, including the owner of the property (Diocese of Allentown) proposed for the Hamilton Crossings for the lack of future direct access to Route 222. The Diocese of Allentown was paid \$1.5 million.

3. According to page 11 of the TIF narrative prepared by the Lehigh County Industrial Development Authority (LCIDA), *"From its inception, the functionality of the Route 222 was constrained by government funding shortages."* This is not accurate. The road was designed to mitigate congestion issues on Hamilton Boulevard in Lower Macungie Township and to facilitate movement of through traffic between western Lehigh County and west Allentown. It was not designed to function as a local property access road.
4. On page 18 of the TIF narrative, it is stated *"The project will improve the functionality of the Route 222 bypass by adding a new eastbound collector/distributor road."* Based on LVPC staff review of the Hamilton Crossings Traffic Impact Study dated April 11, 2013, the proposed traffic improvements will not mitigate the project impacts. There will be level of service drops on Route 222 at Krocks Road and in excess of 10 second delays for through traffic at this intersection. PennDOT design standards require developers to mitigate impacts from their development that exceed 10 seconds of delay compared to the comparable "no build" scenario.
5. PennDOT has informed us that they have not yet approved the road design, removal of the sound wall or repositioning of the sound wall. Also it is our understanding that they are investigating potential complications that might arise if other developers in the area of Route 222 present proposals for new development. We have been informed that PennDOT may not make a decision on this matter until June 2013. At this point we do not know PennDOT's final decision on the changes to Route 222 proposed by the developer for Hamilton Crossings.
6. The County Comprehensive Plan has a policy (page 52) stating "sub-regional, regional and super regional shopping centers should be sited in areas near interchanges on expressways or along major arterials. Hamilton Crossings would become the fourth largest shopping center in the Lehigh Valley. Route 222 is an access controlled road that intersects with Krocks Road. It is not an interchange. Interchanges have the capacity to process a large number of turning movements to a minor road without affecting performance on the major road. Intersections are less able to accomplish that.

7. The County Comprehensive Plan has policies (pages 52, 53, 72 and 75) that state that “developers, not the public, should pay for the improvements attributable to their development and that municipalities should enact an appropriate impact fee ordinance to assure this happens.”

Our review of the TIF narrative and the proposed cost details concludes that the developer is not paying for the traffic improvements required for the project. They are requesting Lehigh County, Lower Macungie Township and the East Penn School District create the TIF to repay bonds that will be issued to finance 100% of the improvements to Krocks Road and they are requesting \$6.4 million in state transportation funding to finance the 100% of the improvements to Route 222 and Hamilton Boulevard.

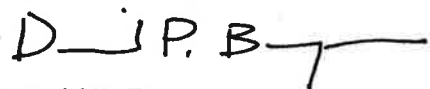
8. The County Comprehensive Plan has a policy (page 59) stating “public sector efforts to influence the amount of business or industrial growth should give high priority to assisting economically and financially depressed communities and population groups.” According to the Lehigh County assessment office, Lower Macungie Township has the third highest assessed valuation of taxable property in Lehigh County (\$1,125,055,500). According to the 2010 U.S. Census the Township has the fourth highest median household income in Lehigh County (\$82,423) and a poverty rate of 4.4% (eighth lowest in Lehigh County).
9. The County Comprehensive Plan has a goal (page 56) of “supporting economic development opportunities that provide jobs at above average wages and improve the regional tax base.” The Plan also has a policy (page 56) of “rejecting land intensive, cheap labor industries that are only viable with public grants, tax relief and other incentives.” According to the March 2013 LV CareerLink Outlook, retail service jobs make \$12.47 an hour with a median wage of \$23,410. For the Lehigh Valley in 2013, wages of \$15K-25K are classified as “low income” by the United States Department of Housing and Urban Development (HUD). (HUD income limits, single person, ABE MSA, 2013). The TIF narrative (page 12) states that without the TIF, “...*commercial development of the site cannot and will not occur.*”
10. The shopping center abuts existing residential neighborhoods. These neighborhoods will be negatively impacted by this development and by the decision to grant waivers to the sections of the Township Zoning Ordinance that would have better protected the adjacent residential neighborhoods. The County Comprehensive Plan has a policy (page 62) that states “neighborhoods should be protected from adverse impacts including environmental impacts. Such impacts include but are not limited to noise, air pollution, visual blight, offensive odors and vibrations.”

- Approximately 525 feet of 18' tall sound wall is proposed to be removed along Route 222. The reconfigured sound wall will be five (5) feet off the property line of two homes on North Broad Street and reduced in height, from 18 feet to 12 feet. (Page 9, Hamilton Crossings Sound Wall Study Final Report, dated March 8, 2013.)
- Due to the reduction in side yard requirements, those houses are 60 feet from the delivery and cardboard compactor areas for the grocery store.
- According to the project's lighting plan, there is light spillage onto the properties on North Broad Street.
- Lower Macungie Township granted variances to sections of the Township Zoning Ordinance on December 19, 2012 for buffer yards, requiring a minimum 10 foot "enhanced landscape area in lieu of the required 50 foot buffer; variance from side yard requirements for commercial uses that would have required a larger side yard, reduced the right-of-way line between the project and the mobile home park to 40 feet instead of 50 feet; and increased the size of permitted screening fences from 8' in height to 10' in height.
- It is further noted that in the February 1, 2013 review of the Township's shopping center regulations, the LVPC stated "*...suggest the Township consider specifying buffering requirements between the shopping center and adjacent uses, namely residential neighborhoods. As written, the LVPC does not feel the regulations are adequate in protecting adjacent non-commercial land uses such as residential neighborhoods. The draft regulations stop short of specifically requiring shopping centers to buffer neighborhoods from undesirable impacts such as fumes, noise, visual blight and glare associated with the shopping center.*"

The project site is located within the Little Lehigh Creek watershed. The watershed has a fully implemented Act 167 Stormwater Management Ordinance. Our review of the project's stormwater management plan is enclosed as Attachment #1.

Feel free to call me if you have any questions about this review.

Sincerely,



David P. Berryman
Chief Planner

cc: Ronald Eichenberg, President, Lower Macungie Township Board of Commissioners
Sara Pandl, AICP, Planning Director, Lower Macungie Township
Bill Erdman, PE, Keystone Consulting Engineers, Inc. (Wescosville)
Bud Newton, Jr., PE, Newton Engineering Group, PC
Michael Rebert, District Executive, District 5-0, PennDOT
Lisa Scheller, Chair, Lehigh County Board of Commissioners
Charles Ballard, President, East Penn School District Board of Directors
Steven Hill, President, Alburtis Borough Council
Lee Ann Gilbert, President, Emmaus Borough Council
Donna Wright, Chair, Lower Milford Township Board of Supervisors
Chris Becker, President, Macungie Borough Council
Edward Earley, Chair, Upper Macungie Township Board of Supervisors
Dan Mohr, Chair, Upper Milford Township Board of Supervisors
Tim Harrison, TGG/TCH – Hamilton Crossings Associates, LP
Jeremy Fogel, TGG/TCH – Hamilton Crossings Associates, LP

ATTACHMENT 1

Act 167 Drainage Plan Review

May 31, 2013

Re: Hamilton Crossings
Plans Revised April 15, 2013
Lower Macungie Township
Lehigh County

The proposed storm drainage concept presented in the plans revised April 15, 2013 and in the storm drainage and HEC-RAS calculations dated April 15, 2013 has been reviewed for consistency with the *Little Lehigh Creek Watershed Act 167 Storm Water Management Ordinance*, June 1999. A checklist of the Act 167 review items is attached for your information. As indicated on the checklist, each item of the Drainage Plan has been reviewed for consistency with the Act 167 Ordinance. A brief narrative of the review findings is as follows:

The proposed development is located within drainage district 186 of the Little Lehigh Creek Watershed as delineated in the Act 167 Plan. As such, the runoff control criteria for the site are a 30% Release Rate for the 2-year storm and a 90% Release Rate for the 10-, 25- and 100-year return period storms on an overall site basis, with no individual point of discharge exceeding a 100% Release Rate. Based on a review of the applicant's calculations, the 2-year Release Rate is not met on an overall site basis and the 100% Release Rate is not met for any event in area F. The following issues with the Drainage Plan should be addressed:

- Post-development bypass calculations for area F should be included. Also, the applicant should check the calculations for bypass area A-2 pre-development, as the areas used in the calculations appear to be much larger than those shown on the plans.
- The applicant should specify on the plans the areas that were considered "onsite" versus "offsite" in the calculation of the allowable post-development discharges.
- Time of concentration calculations should also be provided for all drainage areas.
- Quarry drainage areas 6, 9, 10, 11, and 12 should use roughness coefficients consistent with meadow areas.
- Travel time (Tt) values for all hydrographs created using a single subarea should be zero.
- The applicant's routings for the existing closed depressions south of the Route 222 bypass show unstable routed hydrographs. The applicant should increase the number of calculated outflow points in the rating curve to attempt to stabilize the discharge hydrographs for these facilities.
- The HEC-RAS analysis for the channel downstream of the existing 66" pipe under the Route 222 bypass appears to be modeling part of the flow as being in the PennDOT basins on either side of the channel. This analysis should be revised to constrain this runoff to the channel.
- The applicant should provide capacity calculations for all existing swales and culverts downstream of the development to point of interest A.
- The proposed pipe connection from the improvements associated with the Shepherd's Corner development should be shown on the plans.
- The applicant uses HSG A soils for areas 5 and 7 in the post-development quarry calculations. All of the quarry areas should use HSG B soils.
- The applicant should include cumulative volume columns in the tabulations of the post-development quarry inflow hydrographs to show that volume is conserved through their hydrograph modifications.
- There appear to be two inconsistencies in routed hydrographs. The peak flow for the pre-development 10-year combined area A bypass and north closed depression hydrograph is less

than the area A bypass peak flow by itself. Also, the 100-year routed hydrograph for the LMT pond does not appear to match the calculated hydrograph shown for that area. These hydrographs should be checked.

- The proposed headwall NL-12 and associated conveyance system appears to allow runoff to bypass the regional basin's control structure. This system should be accounted for in the regional pond routing.
- There are inconsistencies between the plans and calculations for the orifice sizes and elevations for the Costco and LMT ponds. These inconsistencies should be corrected.
- The applicant should consider the effects of the outfall culverts on the basin discharges. The surface basins in particular appear to have their discharges limited by the outfall culvert design.
- The freeboard requirements are not met for the regional pond or the grocery pond. The emergency spillways should be large enough to pass the 100-year peak inflow with 0.5 feet from the flow depth to the top of berm elevation.
- The applicant is proposing modified contours in the existing PennDOT basin at the northwest corner of the Route 222 bypass and Krocks Road. The applicant should document to proposed changes to this basin with respect to storage volume, discharge, and tributary area. The applicant should show that this basin is still capable of meeting its design goals post-development.

Therefore, the Drainage Plan has been found to be inconsistent with the Act 167 requirements. Last, in accordance with the Act 167 Ordinance, a note should be added to the Plans specifying the long-term maintenance responsibility for the permanent storm drainage facilities.

Note that only those details of the Drainage Plan included on the checklist have been covered by this review. **Therefore, notable portions of the Drainage Plan not reviewed include any aspect of the post-construction storm water management plan concerning water quality, the details and design of any proposed water quality BMPs, the Erosion and Sedimentation Control Plan and the details of the runoff collection system (piping).** These items are reviewed by the municipal engineer and/or others, as applicable.

Please call me with any questions regarding these comments.

Sincerely yours,



Geoffrey A. Reese, P.E.
Assistant Director

Attachment

cc: Lehigh County Conservation District

LVPC ACT 167 REVIEW CHECKLIST

Development Name: Hamilton Crossings
Municipality: Lower Macungie Township
Date: May 31, 2013

Watershed: Little Lehigh Creek
Reviewer: Travis I. Bartholomew, PE
Checked by: Allen R. O'Dell, PE

Ordinance Reference	Item	Consistency w/Ordinance			Comment
		Yes	No	N/A	

301.A-G. General storm water management requirements X / /
H. Consideration of volume controls / X /

Preferred but not required.

302.A,B. Applicable Storm Water Management Provisions

Subarea(s)	186			
Criteria	30/90% RR			

Criteria Key : RR = release rate; CND I = conditional no detention I; CND II = conditional no detention II

303. A. Design consistency with applicable management provisions from 302.A. and B / X /

2-year RR not met. Applicant is proposing modified contours in the existing PennDOT basin at the northwest corner of the Route 222 bypass and Krocks Road. The applicant should document to proposed changes to this basin with respect to storage volume, discharge, and tributary area. The applicant should show that this basin is still capable of meeting its design goals post-development.

B. Mapping of Storm Water Management District Boundaries / / X
C. Downstream capacity analysis / / X
D. Multiple discharge points within a single subarea / X /
E,F. Multiple discharge points within multiple subareas / / X
K. Documentation of no increase in peak or volume / / X
L. Documentation of "no harm" downstream / / X
M. Regional or subregional detention analysis / / X
N. Capacity improvements analysis / / X

100% RR not met in area F.

304.A. Computation method (rational or soil-cover-complex) / X /

Soil-cover-complex method used. Tt values for all hydrographs with one subarea should be zero. Existing closed depression discharge is unstable. Additional data points should be added to the outlet rating curve. The peak flow for the pre-development 10-year combined area A bypass and north closed depression hydrograph is less than the area A bypass peak flow by itself. Also, the 100-year routed hydrograph for the LMT pond does not appear to match the calculated hydrograph shown for that area. Should consider the effects of the outfall culverts on the basin discharge. Proposed headwall NL-12 and associated conveyance system appears to allow

B. Verification of detention design by routing / X /

C.	Minimum detention pond freeboard specifications	/	X	/
E.	Soil-cover-complex method design rainfall	X	/	/
F.	Rainfall intensities for rational method	/	/	X
G.	Curve Numbers for soil-cover-complex method	/	X	/
H.	Runoff coefficients for the rational method	/	/	X
I.	Volume control storage volume	/	/	X
K.	Common time of concentration	/	/	X
L.	Manning equation to calculate watercourse capacity	X	/	/
403.	Drainage Plan Contents	/	X	/

runoff to bypass the regional basin's control structure. Freeboard requirements are not met for the regional pond or the grocery pond. The emergency spillways should be large enough to pass the 100-year peak inflow with 0.5 feet from the flow depth to the top of berm elevation.

Uses HSG A soils for areas 5 and 7 in the post-development quarry calculations. All of the quarry areas should use HSG B soils.

Post-dev calculations for bypass in area F should be included. Pre-dev bypass A-2 area should be checked. Specify the "onsite" and "offsite" pre-dev areas on the plans. Tc calculations should be provided for all areas. HEC-RAS analysis for the channel downstream of the existing 66" pipe under the Route 222 should be revised to constrain this runoff to the channel. Provide capacity calculations for all existing swales and culverts downstream of the development to point of interest A. Proposed pipe connection from the improvements associated with the Shepherd's Corner development should be shown on the plans. Should include cumulative volume columns in the tabulations of the post-development quarry inflow hydrographs to show that volume is conserved through their hydrograph modifications. There are inconsistencies between the plans and calculations for the orifice sizes and elevations for the Costco and LMT ponds. In accordance with the Act 167 Ordinance, a note should be added to the Plans specifying the long-term maintenance responsibility for the permanent storm drainage facilities.